

# ■ Dry shotcreting

## One principle...



The shotcrete technique consists of applying concrete by using a stream of compressed air to spray wet or dry powdered material through a nozzle.

The Freyssinet technique combined with the dry-process shotcrete (Foreva® Shotcrete) method produces concrete up to class B60.

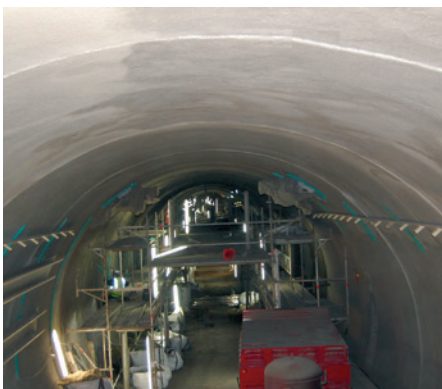
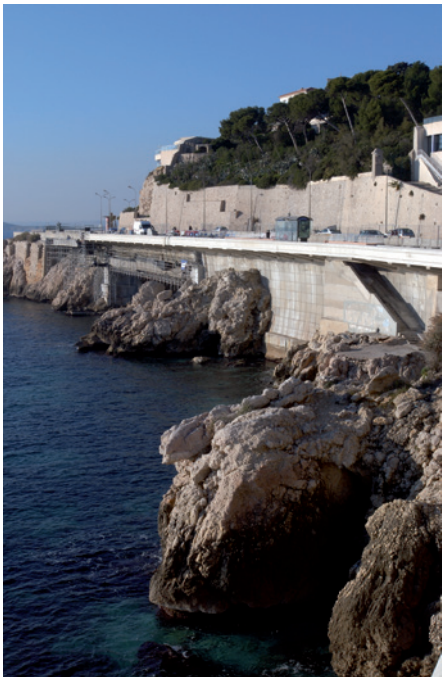
**There are a number of advantages to this method:**

- Fast, flexible application;
- Complete adhesion to the prepared substrate;
- Optimum concrete compaction for improved durability;
- Controlled filling and form through flow rate adjustment and continuous flow of mix in the nozzle;
- Limited shrinkage of concrete applied due to optimum adjustment and metering of water for hydration.

Shotcrete can be used for structural alterations in conjunction with other techniques such as installing reinforcement, Carbon Fibre Fabric (Foreva TFC®), metal fibres, additional prestressing or tie rods.

Backed by sixty years' experience, Freyssinet, a general contractor for specialist works, offers the guarantee of turnkey services to extend the life of your structures with Foreva®.

Our shotcrete is applied by specialist Freyssinet nozzlemen, trained and certified under a shotcrete quality charter.



## Many applications



**Freyssinet's optimised solutions enable it to carry out rehabilitation work in accordance with industry standards and good practice, ensuring minimum disruption to the operation of the structure and to the environment.**

**Shotcrete is mainly used for structural repairs and reinforcement:**

- Buildings and car parks;
- Bridges, viaducts and tunnels;
- Dams, jetties and quays;
- Reservoirs, water towers, drains and pipes;
- Silos, tanks and pools.

**Problems can be caused by:**

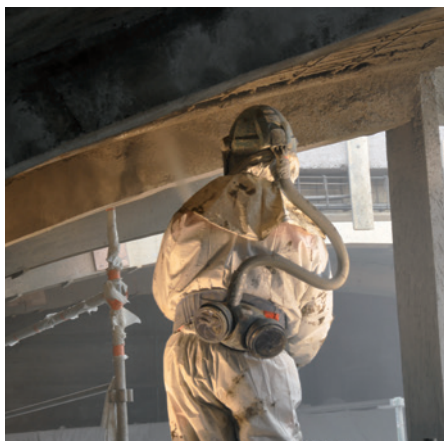
- Incorrect design or construction (lack of coating, lack of reinforcements, etc.);
- The ageing of the structure (damaged facing, masonry, etc.);
- Accidents (fires, explosions, impacts);
- A change in use of the structure (changes in live loads, creation of openings, etc.).

**All types of structural element can be reinforced, allowing for a wide variety of reprofiling work:**

- Beams, columns and floor slabs;
- Arches;
- Precast elements;
- Circular structures.

**Shotcrete can also be applied on new build projects, particularly for free-form work:**

- Architectural facings;
- Rocks, climbing walls;
- Nailed walls, etc.



**Our specialist teams are here to help you solve your problems and guide you through your modernisation projects.**

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